

approach to manufacture low cost multilayer piezoelectrics. The method of the invention is performed at low firing temperature and without the oxidation of base metal or reduction of ceramic components. A variety of ceramic materials may be used and copper is the preferred base metal in the multi-layer piezoelectric devices of the invention. This copper has additional protection against oxidation with a small inorganic coating on the surface. With such protection, the binder and other organics can also be efficiently removed and produce superior performance in the piezoelectric structured devices.

In the Claims:

The claims have been amended as follows:

1. (Amended) A process for preparing a multilayer piezoelectric device with alternating piezoelectric ceramic layers and base metal layers as electrodes comprising the steps of:
 - (a) applying onto a first layer, which includes a piezoelectric ceramic material and a first combination of organic materials, a second layer, which includes a base metal powder having particles, which are coated with material capable of protecting said base metal against oxidation, and a second combination of organic materials, to produce a first structure;
 - (b) applying onto said first structure a second structure, which is identical to said first structure to produce a multilayer structure;